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CAPACITOR WITH PLASMA DEPOSITED DIELECTRIC

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Abstract of the Disclosure

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A capacitor is formed utilizing a plasma deposited capacitor dielectric wherein the plasma deposition is a two-component reaction comprising a silicon donor, which is non-carbon containing and non-oxygenated, and an organic precursor, which is non-silicon containing and non-oxygenated. The plasma deposition produces a capacitor dielectric that can exhibit a low dielectric constant and, in selected depositions, a response to photo-oxidation induced by exposure to radiated electromagnetic energy in the presence of oxygen. Photo-oxidation of selected depositions can be used to alter the dielectric constant of the capacitor dielectric after the capacitor has been fabricated. The capacitor may be used in precision filter applications.